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Timestamp: [year=2008; month=9; day=15; hr=7; min=20; sec=58; ms=178;]

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Application No: 10573372 Version No: 1.0

Input Set:

Output Set:

Started: 2008-09-10 18:18:00.484
Finished: 2008-09-10 18:18:01.426
Elapsed: 0 hr(s) 0 min(s) 0 sec(s) 942 ms
Total Warnings: 2
Total Errors: 0
No. of SeqIDs Defined: 4
Actual SeqID Count: 4

Error code	Error Description
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<110> Dale, James Langham
Echeverria, Santy Peraza

<120> BANANA RESISTANCE GENES AND USES THEREOF

<130> DAVI172.006APC

<140> 10573372

<141> 2008-09-10

<150> PCT/AU2004/001300

<151> 2004-09-23

<150> AU 2003/905222

<151> 2003-09-25

<160> 4

<170> PatentIn version 3.3

<210> 1

<211> 4380

<212> DNA

<213> Musa acuminata

<220>

<221> CDS

<222> (1)..(4323)

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Arg Arg Arg Gly Leu His Asp Asp Leu Arg Arg Leu Arg Thr Ser Leu	
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Leu Arg Ile His Ala Ile Leu Asp Lys Ala Glu Thr Arg Trp Asn His	
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Tyr Asp Ala Glu Asp Leu Leu Glu Glu Leu Glu Tyr Gln Ala Ala Lys	
85 90 95	

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Ser Leu Ser Thr Ala Ser Glu Trp Leu Gly Ala Asp Gly Asp Asp Ala	
115 120 125	
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Gly Thr Arg Leu Arg Glu Ile Gln Gly Lys Leu Cys Asn Ile Ala Ala	
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145 150 155 160	
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Gln Phe Asp Trp Lys Val Val Arg Arg Glu Thr Ser Ser Phe Leu Thr	
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Tyr Asn Asp Asn Arg Val Gly Asn Tyr Phe His Leu Lys Val Trp Val	
225 230 235 240	
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Cys Val Ser Asp Asn Phe Asn Val Lys Arg Leu Thr Lys Glu Ile Ile	
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Glu Ser Ala Thr Lys Val Glu Gln Ser Asp Lys Leu Asn Leu Asp Thr	
260 265 270	
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Leu Gln Gln Ile Leu Lys Glu Lys Ile Ala Ser Glu Arg Phe Leu Leu	
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Val Leu Asp Asp Val Trp Ser Glu Asn Arg Asp Asp Trp Glu Arg Leu	
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Cys Ala Pro Leu Arg Phe Ala Ala Arg Gly Ser Lys Val Ile Val Thr	
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Lys Thr Leu Gly Ser Leu Leu Arg Leu Asp Val Ser Gln Glu His Trp	
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Glu Ile Leu Pro Val Leu Trp Leu Ser Tyr Gln His Leu Pro Gly His	
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Leu Arg Gln Cys Phe Ala Phe Cys Ala Val Phe His Lys Asp Tyr Leu	
435 440 445	
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Phe Tyr Lys His Glu Leu Ile Gln Thr Trp Ile Ala Glu Gly Phe Ile	
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Ala His Gln Gly Asn Lys Arg Met Glu Asp Val Gly Ser Ser Tyr Phe	
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His Glu Leu Val Asn Arg Ser Phe Phe Gln Glu Ser Arg Trp Arg Gly	
485 490 495	
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Arg Tyr Val Met His Asp Leu Ile His Asp Leu Ala Gln Phe Ile Ser	
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Val Gly Glu Cys His Arg Ile Asp Asp Asp Lys Ser Lys Glu Thr Pro	
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Gln	Arg	Asn	Gln	Tyr	Pro	Tyr	Met	Thr	Lys	Val	Asn	Ser	Cys	Leu	Leu	
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Pro	His	Ser	Leu	Phe	Lys	Arg	Leu	Lys	Arg	Ile	His	Val	Leu	Val	Leu	
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Gln	Leu	Arg	Tyr	Leu	Asp	Ile	Ser	Tyr	Asn	Ala	Cys	Ile	Gln	Arg	Leu	
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Pro	Glu	Ser	Leu	Cys	Asp	Leu	Tyr	Asn	Leu	Gln	Ala	Leu	Arg	Leu	Trp	
625					630					635					640	
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Gly	Cys	Gln	Leu	Arg	Ser	Phe	Pro	Gln	Gly	Met	Ser	Lys	Leu	Ile	Asn	
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Arg	Ser	Thr	Leu	Arg	Ile	Thr	Asn	Leu	Glu	Asn	Val	Gly	Ser	Lys	Glu	
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gaa	gca	agc	aag	gct	aaa	ctg	cac	agg	aaa	cag	tat	ctt	gaa	gca	tta	2208
Glu	Ala	Ser	Lys	Ala	Lys	Leu	His	Arg	Lys	Gln	Tyr	Leu	Glu	Ala	Leu	
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Glu	Leu	Glu	Trp	Ala	Ala	Gly	Gln	Val	Ser	Ser	Leu	Glu	His	Glu	Leu	
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Leu	Val	Ser	Glu	Glu	Val	Leu	Leu	Gly								

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Cys Thr Arg Leu Glu Gly Leu Ser Tyr Ile Gly Gln Leu Pro His Leu			
805	810		815
aag gtc ctt cat atg aag aga atg cct gtg gtg aaa caa atg agt cat			2496
Lys Val Leu His Met Lys Arg Met Pro Val Val Lys Gln Met Ser His			
820	825		830
gaa tta tgt ggc tgt acg aaa agc aag ttg ttc cct agg cta gaa gag			2544
Glu Leu Cys Gly Cys Thr Lys Ser Lys Leu Phe Pro Arg Leu Glu Glu			
835	840		845
tta gta ctg gag gat atg cca aca ttg aaa gaa ttc ccg aat ctt gca			2592
Leu Val Leu Glu Asp Met Pro Thr Leu Lys Glu Phe Pro Asn Leu Ala			
850	855		860
caa ctt cct tgt ctc aag att att cac atg aag aac atg ttt gca gta			2640
Gln Leu Pro Cys Leu Lys Ile Ile His Met Lys Asn Met Phe Ala Val			
865	870	875	880
aaa cat ata ggt cgt gaa tta tat ggt gat ata gag agc aat tgt ttt			2688
Lys His Ile Gly Arg Glu Leu Tyr Gly Asp Ile Glu Ser Asn Cys Phe			
885	890		895
cta tca tta gaa gag ctt gtg ctg cag gac atg ctg aca ttg gag gaa			2736
Leu Ser Leu Glu Glu Leu Val Leu Gln Asp Met Leu Thr Leu Glu Glu			
900	905		910
ctc cca aat ctt gga caa ctt cca cat ctt aag gtt att cac atg aag			2784
Leu Pro Asn Leu Gly Gln Leu Pro His Leu Lys Val Ile His Met Lys			
915	920		925
aac atg tct gca ctg aaa ctt ata ggt cgt gaa tta tgt gat tct aga			2832
Asn Met Ser Ala Leu Lys Leu Ile Gly Arg Glu Leu Cys Asp Ser Arg			
930	935		940
gag aaa att tgg ttt cct agg cta gaa gtg cta gtg ctg aag aac atg			2880
Glu Lys Ile Trp Phe Pro Arg Leu Glu Val Leu Val Leu Lys Asn Met			
945	950	955	960
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Phe Phe Ala Ser Ser Val Glu Val Gly His Gly Leu Phe Ser Ala Thr			
980	985		990
agg aat aaa tgg ttt cca agg ctg gaa gag cta gaa atc aag ggc atg			3024
Arg Asn Lys Trp Phe Pro Arg Leu Glu Glu Leu Glu Ile Lys Gly Met			
995	1000		1005

ctg aca	ttt gag gaa ctc cat	tct ctt gaa aaa ctg	cca tgt ctc	3069
Leu Thr	Phe Glu Glu Leu His	Ser Leu Glu Lys Leu	Pro Cys Leu	
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Lys Val	Phe Arg Ile Lys Gly	Leu Pro Ala Val Lys	Lys Ile Gly	
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His Gly	Leu Phe Asp Ser Thr	Cys Gln Arg Glu Cys	Phe Pro Arg	
1040	1045	1050		
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Leu Glu	Asp Leu Val Leu Ser	Asp Met Pro Ala Trp	Glu Glu Trp	
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Ser Trp	Ala Glu Arg Glu Glu	Leu Phe Ser Cys Leu	Cys Arg Leu	
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Lys Ile	Glu Gln Cys Pro Lys	Leu Lys Cys Leu Leu	Pro Ile Pro	
1085	1090	1095		
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His Ser	Leu Ile Lys Leu Glu	Leu Trp Gln Val Gly	Leu Thr Gly	
1100	1105	1110		
ctt cca	gga tta tgc aaa gga	att ggt gga ggt agc	agc act aga	3384
Leu Pro	Gly Leu Cys Lys Gly	Ile Gly Gly Gly Ser	Ser Thr Arg	
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Thr Ala	Ser Leu Ser Leu Leu	His Ile Ile Lys Cys	Pro Asn Leu	
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aga aat	ctg gga gaa ggg ttg	cta tca aac cac ctg	cca cat atc	3474
Arg Asn	Leu Gly Glu Gly Leu	Leu Ser Asn His Leu	Pro His Ile	
1145	1150	1155		
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Asn Ala	Ile Arg Ile Trp Glu	Cys Ala Glu Leu Leu	Trp Leu Pro	
1160	1165	1170		
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Val Lys	Arg Phe Arg Glu Phe	Thr Thr Leu Glu Asn	Leu Ser Ile	
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Arg Asn	Cys Pro Lys Leu Met	Ser Met Thr Gln Cys	Glu Glu Asn	
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Asp Leu	Leu Leu Pro Pro Leu	Ile Lys Ala Leu Glu	Leu Gly Asp	
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